Yet another embodiment of the invention is a method of communications. A client device communicates with a server computer over a network. The method includes receiving an information by the server computer, pre-processing the information by replacing sequences of data of the information with pre-defined identifiers, and sending the information with the pre-defined identifiers substituted for the sequences of data.

Another embodiment of the invention is a server computer for receiving information including data sequences and for relating data sequences to defined identifiers. The server computer includes a pre-processor for replacing data sequences of the information with defined identifiers.

Brief Description of the Drawings

The present invention is illustrated by way of example and not limitation in the accompanying figures, in which like references indicate similar elements, and in which:

FIG. 1 illustrates a network, for example, the Internet, including a wireless communications portion and a wireless application service provider (ASP) system including a wireless ASP server computer in wireless communications with a wireless device;

FIG. 2 illustrates a parser of a server computer for distinguishing and segregating data types of information received by the server communication, for prioritized communications according to data types to a client device;

FIG. 3 illustrates a method of operation of the parser and server computer of FIG. 2, according to embodiments of the present invention;

FIG. 4 illustrates a pre-processor of a server computer for replacing data sequences with defined identifiers to reduce a size of information to be communicated by

the server computer to a client device, according to embodiments of the present invention;

FIG. 5 illustrates a method of operation of the pre-processor and server computer of FIG. 4, according to embodiments of the present invention.

Detailed Description of Preferred Embodiments

Network with Wireless ASP System

Referring to FIG. 1, a communications system 100 includes a wireless communications portion and a wired communications portion. The system 100 includes a network, such as the Internet 102. The network is operable according to a particular packetized data protocol, such as transport control protocol/Internet protocol (TCP/IP) or some other network protocol. The network, such as the Internet 102, interconnects various computing and communications devices, for example, among other devices, a server computer 104 and a wireless ASP server computer 106. The server computer 104 and the wireless ASP server computer 106 are each one or more server computers including a microprocessor, memory storage, and communications capabilities via wire or wireless connection with the Internet 102. The server computer 104 and the wireless ASP server computer 106 communicate over the Internet 102 or other network via the particular protocol of the network, such as the standard Internet network protocol TCP/IP.

The network, such as the Internet 102, is also connected with a wireless communications service provider 108. The wireless communications service provider 108 is, for example, a cellular or other packetized data wireless communications network. The wireless service provider 108 connects by wire connection with the network, such as the Internet 102. Alternatively, the wireless communications service provider 108 could

connect with the network 102 by other communications connection, such as fiber optic, coax cable, wireless channel, or other communications connection. Furthermore, although the wireless communications service provider 108 is illustrated as a single particular communications channel, multiple links and multiple channels of those links, for example, communications links of wired and wireless channels, can alternatively provide the same functions and are included for purposes of the description.

The wireless service provider 108 is capable of communicating through wireless channels with various devices, such as a wireless device 200. The wireless device 200 is a processing device, such as a data-enabled cellular telephone, a personal digital assistant, a laptop computer, or any of a wide variety of other processing devices that can wirelessly communicate with the wireless service provider 108. Of course, the wireless device 200 includes communications equipment for accomplishing the wireless communication with the wireless service provider 108, such as wireless modem.

The wireless device 200 communicates through the wireless service provider 108 and over the network, such as the Internet 102, with the wireless ASP server computer 106. The wireless ASP server computer 106 serves as a dedicated server for the wireless device 200 in its communications. The wireless ASP server computer 106 sends and receives communications to and from the wireless device 200 over the network, such as the Internet 102, and on through the wireless service provider 108. The wireless ASP server computer 106 also communicates over the network, such as the Internet 102, with other network connected devices, such as the server computer 104, via particular protocols in communications channels enabled for such communications on the network. In certain embodiments, for example, the wireless ASP server computer 106 and the